



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Faquir JAIN and Fotios PARADIMITRAKOPOULIS

Art unit: 1774

Examiner: GARRETT, Dawn

Serial No. 09/547,415

Filed: April 11, 2000

For: FULL COLOR DISPLAY STRUCTURE USING CNC THIN FILM
AMENDEMNT (marked-up version)

Commissioner of Patents
Washington, D.C. 20231

Sir:

In response to USPTO communication dated March 14, 2003, please amend the application as follows:

IN THE CLAIMS:

Please rewrite claim 1 as follows:

--1. (twice amended) A *p-n* junction electroluminescent (EL) device, comprising successive multiple layers of:

a semiconductor-on-insulator substrate;

a *p*-[doped] type Si layer grown on the said substrate, part of the layer being oxidized to isolate the electrodes at the bottom of said device;

a thin layer of Si [relative to] thinner than the substrate which allows further epitaxial growth;

a *p*-[doped]type [wide energy gap relative to the cladded nanocrystals (CNCs)] semiconductor layer grown epitaxially;

a layer comprising pseudomorphic cladded quantum dots nanocrystals (CNCs) with narrower energy gap semiconductor layer than said *p*-type layer deposited on the said *p*-type layer for [lattice-matched] lattice-matching and electroluminescence;

a semiconductor layer [relative to] thinner than the substrate, having *n*-type conductivity [with wide energy gap relative to] and wider energy gap than the cladded quantum dot nanocrystals (CNCs), grown on the CNC layer; and

a metal layer forming a plurality of top contact electrodes deposited on the *n*-[doped] type wide energy gap semiconductor layer having patterned regions to confine current conduction in [desired] pixels of said EL device.--

Please rewrite claims 38-44 as follows:

1774
RECEIVED
JUN 12 2003
TC

C/#17
06/18/03
AS